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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,217	04/28/2000	Miska Hannuksela	442-009400-US(PAR)	3689

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EXAMINER
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WILSON, ROBERT W

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/560,217	<b>Applicant(s)</b> HANNUKSELA, MISKA	
	<b>Examiner</b> Robert W. Wilson	<b>Art Unit</b> 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 102-128 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 102-128 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 112, 125, & 128 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 112, what is meant by “the base layer of a particular data unit has a greater safety time than of the enhancement layer of the particular data unit”? Is the applicant trying to sat that that data units are being sent by both the base layer and enhancement layer and the duration to receive a data unit from the base unit is “safer”?

Referring to claim 125, what is meant by “the layers of the or each data units with different safety times”?

Referring to claim 128, what is meant by “so that an initial buffering time required at the client for full quality playback of the data signal with full channel throughout and an initial buffering time required at the client for reduced quality playback of the data signal with a predetermined reduced channel throughput are equal”? What is meant by “channel throughout” (Should this be throughput)? The above limitation needs to be clarified.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 102, 104, 107-111, 113-114, 116-121, & 126-127 are rejected under 35

U.S.C. 102(B) as being anticipated by Colby (WO 98/37699)

Referring to claim 102, Colby teaches a server for transmitting video data or data signal which is in an original format or predetermined order over a transmission link per Fig 3 and per Pg 3 line 25-Pg 5 line 29. The video data is transmitted resequenced as front-loaded data followed by remaining video frames which are sent in order of importance rather than original format or predetermined order per Fig 3 and per Pg 3 line 25-Pg 5 line 29.

In addition Colby teaches:

Regarding claim 104, the content manager and frame selector are the means for changing the order of the data units per Fig 3 and per Fig 5 and per Pg 15 lines 10-23.

Regarding claim 107, the content manager and frame selector edit the video or data signal into front-loaded data and remaining video frames per Fig 3 and per Pg 3 line 25-Pg 5 line 29.

Regarding claim 108, MPEG or sequence of pictures which inherently product a moving image.

Regarding claim 109, the MPEG data inherently represents a video sequence.

Regarding claim 110, the video signal is MPEG data which comprises multimedia data.

Referring to claim 111, Colby teaches a transmission system for transmitting video data or data signal which is in an original format or predetermined order over a transmission link between a server or data source and a client or data sink per Fig 3 and per Pg 3 line 25-Pg 5 line 29. The video data or data units are transmitted resequenced as front-loaded data followed by remaining

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video frames which are sent in order of importance rather than original format or predetermined order per Fig 3 and per Pg 3 line 25-Pg 5 line 29.

In Addition Colby teaches:

Regarding claim 113, the server shown in Fig 3 is the source.

Regarding claim 114, the server or source has a content server and frame selector which edits and therefore is an editor.

Regarding claim 116, the reference teaches that these techniques are used in GSM mobile telecommunications per Pg 13 lines 1-5. GSM inherently has a mobile terminal.

Regarding claim 117, the reference teaches that these techniques are used in GSM mobile telecommunications per Pg 13 lines 1-5. GSM inherently has a mobile telephone which is utilized by the client or sink.

Regarding claim 118, the reference teaches a content server and frame selector which has the means for checking the progress as well as adjusting the order based upon available bandwidth per Fig 3 and Fig 5 respectively.

Referring to claim 119, Colby teaches a method of transmitting video data or data signal which is in an original format or predetermined order over a transmission link between a server or data source and a client or data sink per Fig 3 and per Pg 3 line 25-Pg 5 line 29. The video data or data units are transmitted resequenced as front-loaded data followed by remaining video frames which are sent in order of importance rather than original format or predetermined order per Fig 3 and per Pg 3 line 25-Pg 5 line 29.

In Addition Colby teaches:

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Regarding claim 120, the client returns the data units to their original order or original sequence after they have been transmitted over the transmission link per Pg 3 line 25-Pg 5 line 29.

Regarding claim 121, the reference teaches a content server and frame selector checks the progress as well as adjusting the order based upon available bandwidth per Fig 3 and Fig 5 respectively.

Referring to claim 126, Colby teaches a video data or data signal having an original format or predetermined order with inherent data units over a transmission link between a server or data source and a client or data sink per Fig 3 and per Pg 3 line 25-Pg 5 line 29. The video data or data units are transmitted resequenced as front-loaded data followed by remaining video frames which are sent in order of importance rather than original format or predetermined order per Fig 3 and per Pg 3 line 25-Pg 5 line 29.

Referring to claim 127, Colby teaches method of controlling a video data or data signal having an original format or predetermined order with inherent data units over a transmission link between a server or data source and a client or data sink per Fig 3 and per Pg 3 line 25-Pg 5 line 29. The content manager per Fig 3 monitors the condition of the transmission link per Fig 3 and per Pg 3 lines 1-12. The content manager per Fig 3 inherently provides a control signal to the Frame selector module shown in Fig 5 and per Pg 15 lines 10-23 which changes the video frame selected in response to the contention of the transmission link not being adequate.

The content manager in conjunction with the frame selector select data units for transmission resequenced as front-loaded data followed by remaining video frames which are sent in order of importance rather than original format or predetermined order per Fig 3 and per Pg 3 line 25-Pg 5 line 29. The data units are transmitted between the server or source and client or data sink per

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Pg 3 and per Pg 3 line 25-Pg 5 line 29. The client receives the video frames as resequenced as front-loaded data followed by remaining video frames which are sent in order of importance.

Next the client restores the video frames to their original format or predetermined order per Fig 3 and per Pg 3 line 25-Pg 5 line 29.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 122-123 & 125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby (WO 98/37699).

Referring to claim 122, it is within the level of one skilled in the art at the time of the invention to implement the method of claim 119 as software or a computer program product. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the program on a computer readable medium in order for the program to be executable on a processor.

In Addition Colby teaches:

Regarding claim 123, the reference teaches a server per Fig 3. It would have been within the level of one skilled in the art at the time of the invention to implement the server in software or computer program product. It would have been obvious to one of ordinary skill in the art at the

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time of the invention to store the program on a computer readable medium in order for the program to be executable on a processor.

Regarding claim 125, the applicant broadly claims data units with different safety times. The reference teaches that the front-loaded data is sent followed by the remaining video frames. The examiner interprets that each of the are sent at different safety times.

7. Claim 128 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colby (WO 98/37699) in view of Chen (U.S. Patent No.: 6,040,866)

Referring to claim 128, Colby teaches: a method of transmitting video or data signal between a server and client for replay or playback by the client per Fig 3 and per Pg 1 line 28-Pg 2 line 21. The channel throughput varies per Pg 1 line 28-Pg 2 line 21. The video or data signal includes video frames which are reordered into front loaded data or primary data units and remaining data or secondary data units which is the order of priority. The client has an algorithm that changes the order from the front loaded data units or primary data units and remaining data units or secondary data units into the original frames or original sequence of data units per Fig 3 and per Pg 1 line 28-Pg 2 line 21.

Colby does not expressly call for: the size of the buffer which determines the amount of the data store in the buffer or buffer time to be the same for both the full channel throughput which is the full quality playback to be the same as the buffer time for the reduced quality playback

Chen teaches: predetermined buffer size and buffer time or delay can be utilized with various data rates per col. 1 line 14-col. 2 line 67; thus, allowing the buffer time to be the same for full quality playback as well as reduced quality playback



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It would have been obvious to one of ordinary skill in the art at the time of the invention to add the scheduler or Chen to the method of Colby in order to prevent buffer overflow.

8. Claims 103, 105-106, and 124 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby (WO 98/37699) in view of van der Schaar (U.S. Patent No.: 6,788,740)

Referring to claim 103, Colby teaches: a server according to claim 102. Colby does not expressly call for in which the data units represent a base layer and at least one enhancement layer

Van der Schaar teaches: MPEG packets are created with a base layer and at least one enhancement layer per Fig 2 and per col. 1 lines 30-67.

It would have been obvious to add the base layer and at least one enhancement layer of van der Schaar the server of Colby in order to build packets with are based upon MPEG standards.

Referring to claim 105, Colby teaches: a server according to claim 102. Colby does not expressly call for: scalable signal

Van der Schaar teaches: scalable signal per col. 1 lines 30-67.

It would have been obvious to add the scalable signal van der Schaar the server of Colby MPEGs which are standards compliant.

Referring to claim 106, the combination of Colby and van der Schaar teach: a server according to claim 105. The combination of Colby and van der Schaar do not expressly call for: scalable domain selected from the group consisting of temporal, the spatial, and the spectral and the SNR per col. 1 lines 50-63.

It would have been obvious to add the scalable domains of van der Schaar to the server of the combination of Colby and van der Schaar in order to be standards compliant.

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Van der Schaar teaches: MPEG packets are created with a base layer and at least one enhancement layer per Fig 2 and per col. 1 lines 30-67.

It would have been obvious to add the base layer and at least one enhancement layer of van der Schaar to the server in order to build MPEG packets that are standards compliant.

Referring to claim 124, Colby teaches: a computer program product according to claim 122.

Colby does not expressly call for: editor for a scalable scalable signal

Van der Schaar teaches: scalable signal which inherently has an editor per col. 1 lines 30-67.

It would have been obvious to add the editor of scalable signal van der Schaar the computer program product of Colby in order to build MPEGs which are standards compliant.

***Response to Amendment***

7. Applicant's arguments with respect to claims 102-128 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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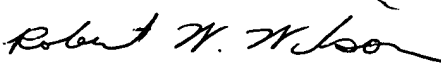
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

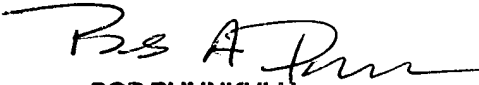
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571/272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Robert W Wilson  
Examiner  
Art Unit 2661

RWW  
1/11/06

  
**BOB PHUNKULH**  
**PRIMARY EXAMINER**